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An annotated checklist of Wisconsin Mordellidae (Coleoptera)

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Abstract: A three-year survey of Wisconsin Mordellidae (Coleoptera) encompassing a compilation of data from literature records and local collections as well as field work including trapping, hand-collecting, and rearing yielded 68 species comprising 14 genera in three tribes. Sixty-three species (92% of Wisconsin fauna) represent new state species records, not previously recorded from the state in the literature. Plant-associations and state-specific temporal and spatial distribution data for larvae and adults are noted as available. Distributional records suggest 16 additional species and one additional genus are likely to occur in Wisconsin.

Introduction

The family Mordellidae is a widely distributed, speciose, and commonly encountered beetle taxon. There are approximately 1500 species worldwide comprising 113 genera. In North America north of Mexico there are 17 genera comprising 201 species (Jackman and Lu 2002, Lisberg 2004). Despite the relative abundance of Mordellidae, natural history and distribution data for North American species are scant. Adult mordellids are phytophagous and feed from the flowers of many taxonomically diverse plants (Robertson 1928, Lu 1997, Jackman and Lu 2002, present study), however, species-specific records of adult mordellid food plants are rare. Larvae are stem and wood-borers whose food consists largely of pithy plant stems and rotten wood (Lawrence 1991, Ford and Jackman 1996). Larvae of Mordellini are usually collected from woody plants whereas larvae of Mordellistenini are more common in stems of pithy herbaceous plants (Jackman and Lu 2002), but species-specific plant-larval associations are also rare. Distributional data for North American Mordellidae point out many gaps. Published Wisconsin records of Mordellidae are particularly sparse, historically accounting for merely five species in three genera: *Tomoxia lineella* LeConte (Lisberg and Young 2003), *Mordella atrata* Melsheimer, *Mordella melaena* Germar, *Mordella quadripunctata* (Say), and *Hoshihananomia octopunctata* (Fabricius) (Liljeblad 1945). By comparison, neighboring Illinois boasts 75 species in 13 genera (Bright 1986, Jackman 1991, Jackman and Lu 2001, 2002). No statewide surveys for Mordellidae have previously been conducted in the United States.

Methods

A general, statewide survey of Wisconsin Mordellidae was conducted from literature searches, examination of previously collected material [e.g. private collections, Wisconsin Department of Natural Resources (WI-DNR) specimens and the University of Wisconsin-Madison Insect Research collection (WIRC)] as well as field sampling (particularly in historically undersampled regions of the state.) Sampling methods included the use of passive traps, particularly flight-intercept traps, hand collecting from flowers and foliage, and a small-scale rearing project from prairie floral stem cuttings. Passive traps were used to maximize the overall number as well as geographical and taxonomic breadth of species sampled, whereas hand collecting and rearing provided more in-depth natural history data. Field work from other ongoing studies [e.g. from the WI-DNR and other insect inventory projects] also contributed significant data to this study.

Results

This survey yielded 68 Wisconsin species comprising 24 genera. A permanent voucher collection of Wisconsin Mordellidae was developed and is housed in the WIRC. Data for these specimens (species, distribution, and natural history data) were compiled and recorded in an established WIRC database which utilizes BIOTA software (Colwell 1996).

The following checklist of Wisconsin Mordellidae includes 63 **new state species records**, indicated in **boldface**. To aid interpretation of county records for each species listed, Wisconsin has been divided into nine regions (Map 1, after Kriska and Young 2002

and Hilsenhoff 1995). Plant associations taken from Wisconsin specimen labels in pre-existing collections are listed using the plant names in the exact form, common name or scientific name, given in the original source. Although we concur that it is preferable to consistently provide scientific rather than common names, the variability and occasional duplicity of common names makes their arbitrary replacement a potential source of introducing inaccurate data. Many Wisconsin species still lack detailed natural history information. To reduce redundancy of reporting locality and temporal distributions, all records reported below should be assumed to pertain specifically to adults unless otherwise noted.

Tribe Conaliini

***Conalia helva* (LeConte)** – Late July. **C:** Wood.

Tribe Mordellini

***Tomoxia inclusa* LeConte** – Collected at flight intercept traps, malaise traps, and sweep nets in oak savannas and sandy oak barrens. Mid-June to mid-August. **NW:** Bayfield; **WC:** Jackson, Monroe; **SW:** Grant; **SC:** Sauk; **SE:** Waukesha.

***Tomoxia lineella* LeConte** – Larvae collected from a standing, dead, large-toothed aspen (*Populus grandidentata* Michaux) (Lisberg and Young 2003). Adults collected using flight intercept, malaise, and Lindgren funnel traps in southern mesic hardwood, mesic oak, and mixed forests and prairie-forest ecotones. Late June to early August. **NE:** Oconto; **WC:** Monroe; **EC:** Fond du Lac; **SC:** Green, Lafayette, Sauk.

***Mordellaria borealis* (LeConte)** – Early July. **NW:** Bayfield.

***Mordellaria serval* (Say)** – Hand collected from daisy fleabane and elderberry flowers, and collected using flight intercept, malaise, and Lindgren funnel traps in northern and southern mesic hardwood forests, northern dry-mesic forests, oak savannas, oak barrens, an aspen grove, a cut *Pinus banksiana* Lambert, and oak, oak-basswood, oak-pine, and pine-poplar forests. Mid-June to mid-September. **NC:** Oneida; **NE:** Oconto; **WC:** Jackson, Monroe; **C:** Portage, Waupaca, Wood; **EC:** Fond du Lac; **SW:** Grant; **SC:** Dane, Green, Iowa, Lafayette; **SE:** Ozaukee, Racine, Waukesha.

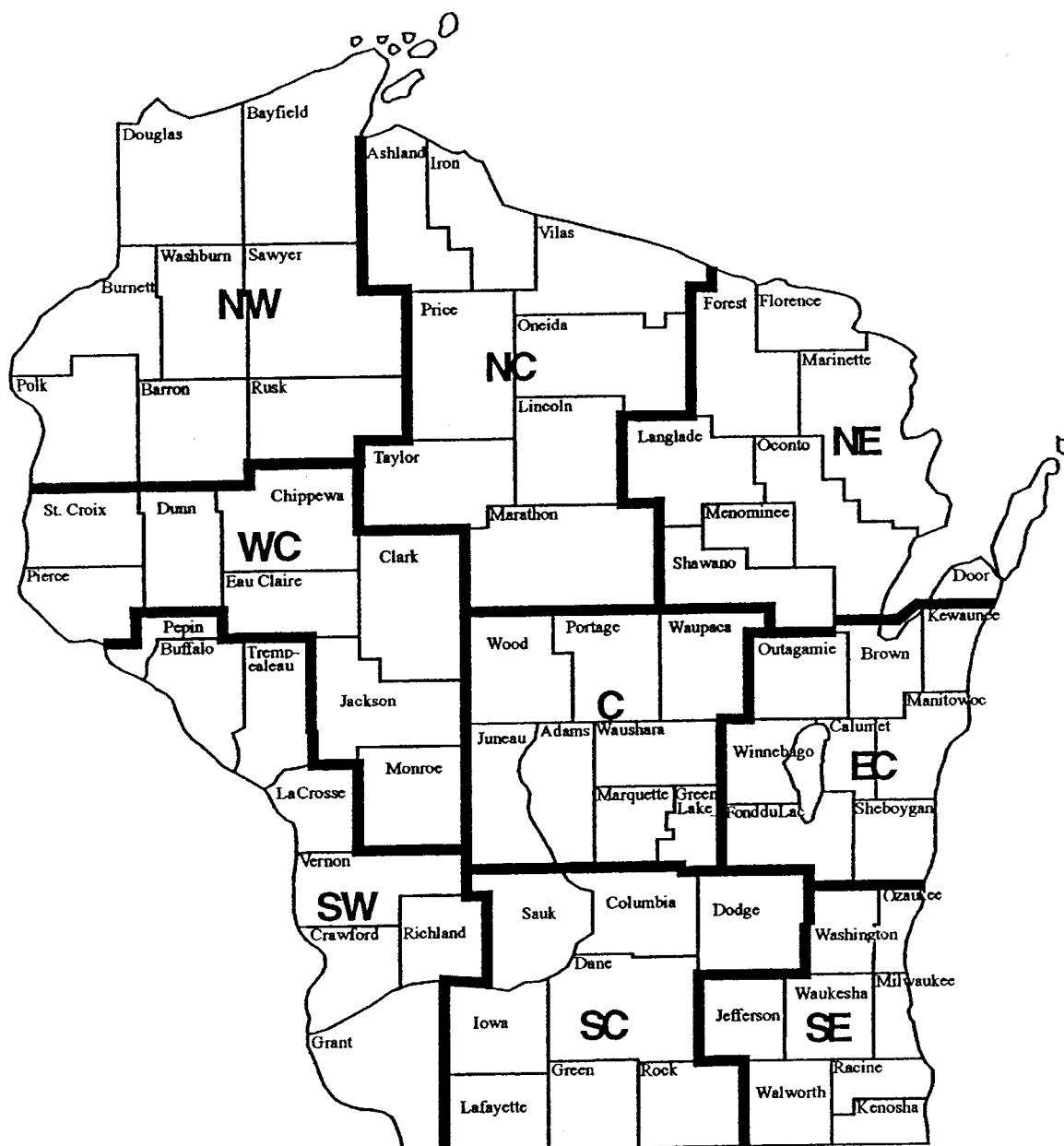
***Mordellaria undulata* (Melsheimer)** – Recovered from flight intercept and malaise traps in oak barrens. Late June to late September. **NC:** Oneida; **NE:** Shawano; **WC:** Jackson; **EC:** Fond du Lac; **SW:** Grant; **SE:** Waukesha.

***Mordella albosuturalis* Liljeblad** – Collected from flowers of *Daucus carota* Linnaeus. Late June to mid-July. **SC:** Dane, Green.

***Mordella atrata* Melsheimer** – Hand collected from flowers of *Amorpha canescens* Pursh, *Anemone canadensis* Linnaeus, *Coreopsis lanceolata* Linnaeus, *Cornus racemosa* Lamarck, *Erigeron annuus* Linnaeus, *Eupatorium perfoliatum* Linnaeus, *Opuntia compressa* Salisbury, *Rosa carolina* Linnaeus, *Spiraea alba* DuRoi, *Trifolium repens* Linnaeus, and white clover. Also recorded from barrier pitfall, flight intercept, malaise, and yellow pan traps and sweep nets in prairies, prairie remnants, and occasionally oak savannas, sand barrens and oak barrens. Early June to late September. **NW:** Bayfield, Burnett; **NC:** Oneida; **NE:** Oconto, Shawano; **WC:** Jackson, Pierce; **C:** Juneau; **EC:** Sheboygan; **SW:** Grant, Richland; **SC:** Columbia, Dane, Green, Iowa, Sauk; **SE:** Walworth.

***Mordella lunulata* Helmuth** – Hand collected from rose and recovered from a yellow pan trap in big bluestem (prairie). Early June to late July. **SC:** Dane; **SE:** Jefferson.

***Mordella marginata* Melsheimer** – Collected from flowers of *Amorpha canescens* Pursh, *Anemone canadensis* Linnaeus, *Berteroa incana* Linnaeus, *Cornus racemosa* Lamarck, *Daucus carota* Linnaeus, *Eupatorium maculatum* Linnaeus, *Euphorbia corollata* Linnaeus, *Parthenium integrifolium* Linnaeus, *Physocarpus opulifolius* Linnaeus, *Rhus glabra* Linnaeus, *Sambucus canadensis* Linnaeus, *Spiraea alba* Du Roi, *Trifolium pratense* Linnaeus, *Viburnum opulus* Linnaeus, orange milkweed, daisy, daisy fleabane, and wild rose, and one specimen was found on a *Cirsium altissimum* Linnaeus stem. Also sampled by using sweep nets and flight intercept, malaise, and yellow pan traps. Late May through early September. **NW:** Bayfield; **NC:** Oneida, Vilas; **NE:** Oconto, Shawano; **WC:** Jackson; **C:** Marquette, Waushara, Wood; **EC:** Fond du Lac, Sheboygan; **SW:** Crawford, Grant, LaCrosse, Richland; **SC:** Columbia, Dane, Green, Iowa, Lafayette, Rock, Sauk; **SE:** Ozaukee, Walworth, Waukesha.



Map 1. Regions of Wisconsin (after Kriska and Young 2002, and Hilsenhoff 1995).

Mordella melaena Germar – Recorded from flowers of *Erigeron annuus* Linnaeus, *Eupatorium perfoliatum* Linnaeus, rose, and Queen Anne's lace. Also recovered from barrier pitfall, flight intercept, and malaise traps from oak savannas, sandy oak barrens, and prairies. Early June through late August. NW: Bayfield; NC: Iron; NE: Shawano; WC: Monroe, Clark; SW: Grant; SC: Columbia, Dane, Lafayette, Sauk; SE: Jefferson, Washington, Waukesha.

Mordella oculata Say – Collected from forests, mid-July to early August. SC: Dane, Green; SE: Washington.

Mordella quadripunctata (Say) – From flowers of *Cicuta maculata* Linnaeus and *Monarda* sp. One specimen was collected in a malaise trap. Late June to late July. NC: Oneida; WC: Clark; SW: Grant; SC: Dane.

Hoshihananomia octopunctata (Fabricius) – At flowers of *Daucus carota* Linnaeus, *Monarda* sp., and

Ceanothus sp. Also collected by hand, using sweep nets, and in flight intercept, malaise, and yellow pan traps in oak savannas, oak barrens, and prairie-forest ecotones. Late May to late August. **NW:** Bayfield; **WC:** Monroe; **C:** Marquette; **EC:** Fond du Lac; **SW:** Grant, Richland, Trempealeau; **SC:** Columbia, Dane, Green, Iowa, Lafayette, Rock, Sauk; **SE:** Washington, Waukesha.

Tribe Mordellistenini

***Mordellochroa scapularis* (Say)** – At flowers of *Heracleum maximum* Bartram, *Prunus* sp., and Queen Anne's Lace, as well as leaves of birch and cranberry. From sweep nets and flight intercept and malaise traps in southern-mesic forests, northern dry-mesic forests, and sandy oak barrens. Mid-May through mid-July. **NC:** Oneida; **NE:** Oconto; **WC:** Eau Claire, Jackson; **EC:** Fond du Lac; **SW:** Grant, Richland; **SC:** Dane, Iowa, Sauk; **SE:** Milwaukee, Racine, Waukesha.

***Mordellistena aemula* LeConte** – Collected using malaise traps from mid-June to early August. **WC:** Jackson; **EC:** Fond du Lac; **SE:** Grant.

***Mordellistena aspersa* (Melsheimer)** – Collected primarily from sweep samples; one specimen recovered from a flight intercept trap. Most commonly collected in dry, dry mesic, and sand prairies; single specimens found in mesophytic and wet prairies. Early June through late August. **NE:** Door, Oconto; **WC:** Dunn, Pierce; **C:** Green Lake, **SW:** Buffalo, Grant, La Crosse, Pepin; **SC:** Columbia, Dane, Green, Iowa, Lafayette, Rock, Sauk; **SE:** Jefferson, Kenosha, Walworth, Waukesha.

***Mordellistena badia* Liljeblad** – One specimen collected from an inflorescence of Queen Anne's Lace. Additional specimens from flight intercept and malaise traps from sandy oak barrens and southern mesic and northern dry mesic hardwood forests. Late June to early August. **C:** Wood; **SC:** Dane, Green, Lafayette; **SE:** Waukesha.

***Mordellistena bicinctella* LeConte** – Recovered from flight intercept and malaise traps in sandy oak barrens. Mid-June to mid-August. **NW:** Bayfield; **EC:** Fond du Lac; **SW:** Grant; **SC:** Iowa, Sauk; **SE:** Waukesha.

***Mordellistena cervicalis* LeConte** – Larvae reared from stems of *Achillea millefolium* Linnaeus and

Erigeron sp. Adults collected from flowers of *Achillea millefolium* Linnaeus, *Cornus racemosa* Lamarck, *Erigeron* sp., black-eyed Susan, daisy fleabane, and goldenrod, as well as from box-elder and daisy. Also collected using sweep nets, flight intercept traps, and malaise traps from prairies, oak savannas, and prairie-forest ecotones. **NW:** Bayfield; **NC:** Oneida, Vilas; **NE:** Oconto; **WC:** Monroe; **C:** Marquette; **SW:** Crawford, Grant, Richland; **SC:** Dane, Green, Iowa, Rock, Sauk; **SE:** Jefferson, Waukesha.

***Mordellistena comata* (LeConte)** – A single specimen from late June. **SC:** Green.

***Mordellistena convicta* LeConte** – Larvae reared from stems of *Helenium autumnale* Linnaeus, *Silphium perfoliatum* Linnaeus, and *Solidago gigantea* Aiton (Andrew Williams, personal communication). Adults collected from prairies and mesic oak forests using sweep nets, flight intercept traps, and malaise traps. Late May through early August. **NC:** Oneida; **WC:** Jackson, Monroe; **EC:** Fond du Lac; **SW:** Grant, **SC:** Dane, Iowa, Rock; **SE:** Walworth.

***Mordellistena dimidiata* Helmuth** – Collected by hand and from malaise traps in southern mixed deciduous hardwood forests and sandy oak barrens. Mid-June to mid-August. **SC:** Dane, Columbia, Lafayette; **SE:** Waukesha.

***Mordellistena divisa* LeConte** – Commonly found feeding on flowers of *Helianthus* (*Helianthus giganteus* Linnaeus, *Helianthus grosseserratus* Martens, *Helianthus occidentalis* Riddell, and *Helianthus tuberosus* Linnaeus). Commonly collected by hand, sweeping and from a yellow pan trap. Early August through late September. **NW:** Barron; **WC:** Chippewa; **SW:** Grant, La Crosse; **SC:** Dane, Green, Lafayette, Sauk; **SE:** Milwaukee, Racine.

***Mordellistena fulvicollis* (Melsheimer)** – Collected using malaise traps in oak savanna and sand prairie ecotones. Early July to late August. **WC:** Monroe; **EC:** Fond du Lac; **SC:** Iowa.

***Mordellistena fuscipennis* (Melsheimer)** – At blacklight; also from flight intercept and malaise traps in sandy oak barrens and northern mesic and dry mesic hardwood forests. Early July to mid-August. **NW:** Bayfield; **NE:** Oconto; **C:** Waupaca, Wood; **SC:** Dane; **SE:** Waukesha.

***Mordellistena gigas* Liljeblad** – From malaise trap samples. Mid-July through early August. **NW:** Bayfield; **EC:** Fond du Lac.

***Mordellistena incommunis* Liljeblad** – From flowers of *Cornus racemosa* Lamarck and *Rosa* sp. Also collected by hand from a prairie-forest ecotone, using sweep nets, and in malaise traps. Late May through early July. **NE:** Oconto; **WC:** Jackson; **SW:** Grant; **SC:** Columbia, Green, Iowa.

***Mordellistena limbalis* (Melsheimer)** – At flowers of *Ceanothus* sp. and from malaise traps on the edge of a southern mixed deciduous hardwood forest and in an oak savanna. Late June through early September. **NC:** Oneida; **WC:** Jackson, Monroe; **SW:** Grant; **SC:** Lafayette.

***Mordellistena liturata* (Melsheimer)** – A single specimen collected from herbaceous vegetation in a mesic-hardwood forest in late June. **SC:** Sauk.

***Mordellistena nigella* Liljeblad** – Recovered from flight intercept and malaise traps. One specimen collected from a sandy prairie. Early July to late August. **SW:** Grant; **SE:** Ozaukee.

***Mordellistena ornata* (Melsheimer)** – Collected from sumac, poplar, *Ceanothus* sp., and flowers of *Cornus racemosa* Lamarck and “*Cornus femina*” (likely *Cornus foemina* Miller.) Also taken at flight intercept and malaise traps in oak savannas, sandy oak barrens, and northern and southern hardwood forests. Early June to late July. **NC:** Oneida; **NE:** Oconto; **WC:** Eau Claire, Jackson, Monroe; **C:** Wau-paca, Wood; **SW:** Grant; **SC:** Dane, Green, Iowa, Lafayette, Sauk; **SE:** Milwaukee, Racine.

***Mordellistena pauxilla* Liljeblad** – From sweep samples, flight intercept traps, and yellow pan traps in dry and dry mesic prairies and dry prairie/savanna ecotones. Early June to late July. **SC:** Dane, Green; **SE:** Ozaukee.

***Mordellistena pulchra* Liljeblad** – Reared from stems of *Achillea millefolium* Linnaeus and *Erigeron* sp. Adults swept from prairies. Mid-July to early August. **SC:** Dane, Green.

***Mordellistena rubrilabris* Helmuth** – Taken from flowers of *Achillea millefolium* Linnaeus, *Coreopsis lanceolata* Linnaeus, *Erigeron* sp., and *Rudbeckia hirta* Linnaeus. Also recovered from malaise traps in

oak and sand barrens. Early June to mid July. **NW:** Bayfield; **WC:** Eau Claire, Monroe; **SW:** Grant, La-Crosse; **SC:** Iowa, Rock; **SE:** Jefferson.

***Mordellistena rufilabris* Liljeblad** – Hand-collected in late-June while feeding on flowers of *Eri-geron* sp. **C:** Marquette; **SC:** Rock.

***Mordellistena sexnotata* Dury** – Collected using malaise traps from mid-June to early August. **NW:** Bayfield; **WC:** Jackson.

***Mordellistena smithi* (Dury)** – Sampled at flight intercept traps in a mesic hardwood forest from mid-to late July. **SC:** Sauk.

***Mordellistena suturella* Helmuth** – Collected from *Coreopsis* sp., harebell, black eyed Susan, and flowers of *Aster* sp., and *Rosa* sp. Also taken using sweep nets and flight intercept traps from dry and mesophytic prairies. Mid-June to late July. **SC:** Dane, Green, Iowa; **SE:** Jefferson, Walworth, Waukesha.

***Mordellistena syntaenia* Liljeblad** – Taken with flight intercept and malaise traps primarily from oak savannas, but also from mesic oak and southern deciduous hardwood forests. Mid-June to mid-August. **NW:** Bayfield; **WC:** Monroe; **SW:** Grant; **SC:** Lafayette.

***Mordellistena tosta* LeConte** – From flowers of sumac. Also collected using sweep nets, blacklights, and malaise traps. One specimen trapped in a malaise trap along edge of southern mixed deciduous hardwood forest. Late June to mid-August. **NE:** Langlade, Oconto; **EC:** Fond du Lac; **SW:** Richland; **SC:** Dane, Iowa, Lafayette; **SE:** Milwaukee.

***Mordellistena trifasciata* Say** – Primarily collected using malaise traps; a single specimen collected in a barrier pitfall trap; from sandy oak barrens, sand prairie/oak savanna ecotones, and mixed deciduous hardwood forests. Late June to early August. **NW:** Bayfield; **NC:** Oneida; **WC:** Jackson, Monroe; **C:** Wood; **SW:** Grant; **SC:** Dane, Iowa, Lafayette; **SE:** Waukesha.

***Mordellistena vera* Liljeblad** – A single specimen hand collected in late July from *Ceanothus* sp. in an oak savannah. **WC:** Monroe.

***Mordellistena vilis* (LeConte)** – Swept from a dry mesic hill prairie. Early June- early July. **SC:** Columbia, Iowa.

***Mordellina ancilla* (LeConte)** – Collected using malaise traps from the edge of a southern mix deciduous hardwood forest. Early June through late August. **NW:** Bayfield; **NC:** Oneida; **NE:** Oconto; **WC:** Jackson; **EC:** Fond du Lac; **SW:** Grant; **SC:** Iowa, Lafayette; **SE:** Waukesha.

***Mordellina blatchleyi* (Liljeblad)** – Swept from sand, dry, dry mesic, and mesic prairies and prairie remnants. Late June to late August. **SW:** Buffalo, Grant; **SC:** Dane, Rock, Sauk.

***Mordellina floridensis* (Ray)** – Recovered from sandy oak barrens using a flight intercept trap. Early to mid-July. **SC:** Sauk.

***Mordellina guttulata* (Helmuth)** – Collected from a restored sandy prairie and an oak forest/marsh ecotone using a flight intercept trap. Also collected using malaise traps and sweep nets. Late May through late August. **NC:** Oneida; **WC:** Jackson; **SW:** Grant; **SC:** Iowa, Lafayette; **SE:** Ozaukee.

***Mordellina impatiens* (LeConte)** – Primarily associated with dry, dry mesic, sand prairies, and prairie remnants, but also collected from sandy oak barrens. Usually collected in sweep nets, but also using flight intercept and malaise traps. Early June through mid-September. **NW:** Bayfield; **WC:** Dunn, Eau Claire, Jackson; **C:** Marquette; **SW:** Grant; **SC:** Dane, Green, Iowa, Lafayette, Sauk; **SE:** Walworth.

***Mordellina infima* (LeConte)** – Found in sweep samples and barrier pitfall, flight intercept, and malaise traps from sand prairies, sand and oak barrens, and oak savannas. Early June through late August. **NW:** Bayfield; **NC:** Oneida; **WC:** Eau Claire, Jackson, Monroe; **C:** Green Lake; **SW:** Grant; **SC:** Dane, Lafayette, Sauk; **SE:** Jefferson.

***Mordellina lecontei* (Ermisch)** – Collected primarily from prairies (sandy, dry, dry mesic, and wet mesic) but also from sandy oak barrens, an oak/maple/pine forest, a dry mesic northern hardwood forest, and a prairie-forest ecotone. Taken using sweep nets, flight intercept traps, and malaise traps. Early June to mid-August. **WC:** Eau Claire, Jackson; **C:** Marquette, Wood; **SW:** Grant; **SC:** Dane, Green,

Iowa, Lafayette, Sauk; **SE:** Kenosha, Ozaukee, Waukesha.

***Mordellina minutalis* (Liljeblad)** – Found in late July using flight intercept and yellow pan traps. **SC:** Dane; **SE:** Jefferson.

***Mordellina nigricans* (Melsheimer)** – Associated with sand prairies, dry mesic prairies, prairie-hardwood forest ecotones, and sandy oak barrens, primarily using sweep nets, but occasionally in flight intercept or malaise traps. Early June through early September. **WC:** Dunn; **C:** Marquette; **SW:** Grant; **SC:** Dane, Green, Iowa, Lafayette, Sauk; **SE:** Waukesha.

***Mordellina parva* (Liljeblad)** – From dry/sand prairies, and sandy oak barrens using sweep nets, and barrier pitfall, flight intercept, and malaise traps. Late May to late August. **NC:** Oneida; **WC:** Jackson; **C:** Marquette; **EC:** Sheboygan; **SW:** Grant; **SC:** Dane, Rock, Sauk; **SE:** Waukesha.

***Mordellina pustulata* (Melsheimer)** – Larvae reared from stems of *Eupatorium maculatum* Linnaeus, *Eupatorium perfoliatum* Linnaeus, *Gentiana andrewsii* Grisebach, *Helenium autumnale* Linnaeus, *Helianthus tuberosus* Linnaeus, *Heliopsis helianthoides* Linnaeus, *Rudbeckia laciniata* Linnaeus, *Solidago canadensis* Linnaeus, *Solidago gigantea* Aiton, and *Vernonia fasciculata* Michaux (Andrew Williams, personal communication), and *Achillea millefolium* Linnaeus. Adults collected from prairies using barrier pitfall, flight intercept, light, and malaise traps and by sweeping. Late May through early August. **NW:** Bayfield; **NC:** Oneida; **NE:** Oconto; **WC:** Jackson; **EC:** Fond du Lac, Sheboygan; **SW:** Grant; **SC:** Dane, Green, Iowa, Lafayette, Rock; **SE:** Jefferson, Kenosha, Ozaukee, Racine, Walworth.

***Mordellina semiusta* (LeConte)** – Collected from sandy oak barrens using malaise traps. Mid-June to early September. **WC:** Jackson; **SW:** Grant; **SC:** Iowa; **SE:** Waukesha.

***Mordellina testacea* (Blatchley)** – Recovered from malaise traps and by sweeping dry mesic and sand prairies. Late May through late August. **NE:** Oconto; **WC:** Jackson, Pierce; **SW:** Grant; **SC:** Dane, Iowa, Sauk.

***Mordellina wickhami* (Liljeblad)** – Taken in dry prairies and sandy oak barrens using sweep nets and

flight intercept and malaise traps. Late June through mid-August. **NW:** Bayfield; **WC:** Jackson; **SW:** Grant; **SC:** Iowa, Lafayette, Sauk.

***Pseudotolida arida* (LeConte)** – Collected from sandy oak barrens, oak savannas, and southern mesic hardwood forests using flight intercept, light, and malaise traps. Late June through late August. **NW:** Bayfield; **NC:** Oneida; **WC:** Jackson, Monroe; **EC:** Fond du Lac; **SW:** Grant; **SC:** Dane, Green, Iowa; **SE:** Waukesha.

***Pseudotolida lutea* (Melsheimer)** – Taken from flight intercept and Lindgren funnel traps and sweeping in sandy oak barrens, oak savannas, and oak forests. **WC:** Monroe; **SW:** Richland; **SC:** Lafayette, Sauk; **SE:** Waukesha.

***Glipostenoda ambusta* (LeConte)** – Collected by hand and using flight intercept and malaise traps. One specimen collected from Queen Anne's Lace, another from oak barrens between sand barrens and a field. Early July through early August. **NE:** Shawano; **SC:** Dane, Iowa.

***Falsomordellistena bihamata* (Melsheimer)** – A single specimen collected in August from the edge of a southern mixed deciduous hardwood forest using a malaise trap. **SC:** Lafayette.

***Falsomordellistena discolor* (Melsheimer)** – Taken from sandy oak barrens and a mixed southern forest with sandy soil using flight intercept and malaise traps. Late June through early August. **WC:** Jackson; **SW:** Grant; **SC:** Iowa, Lafayette; **SE:** Waukesha.

***Falsomordellistena hebraica* (LeConte)** – From the edges of southern mixed deciduous hardwood forests using malaise traps. Late June through mid-July. **NC:** Oneida; **SC:** Iowa, Lafayette.

***Falsomordellistena pubescens* (Fabricius)** – Collected from malaise traps along the edge of a southern mixed deciduous hardwood forest. Late June to late July. **WC:** Jackson; **SC:** Dane, Lafayette.

Discussion

Species of Mordellidae are common in woodlands like Wisconsin's hardwood forests and grasslands like Wisconsin's prairie and savanna remnants. During this study, mordellid species such as *T. lineella*, *M.*

serval, *M. scapularis* and *M. ornata* were collected primarily from hardwood and mixed conifer-hardwood forests. Other species, including *T. inclusa*, *M. undulata*, *T. discoidea discoidea*, *H. octopunctata*, *M. syntaenia*, *P. arida*, and *P. lutea* were collected primarily from sand barrens and oak savannas. Several species, including *M. melaena*, *M. marginata*, *M. divisa*, *M. aspersa*, *M. pustulata*, and *M. impatiens*, were collected almost exclusively from Wisconsin prairie remnants, which are particularly prevalent in the southwest region of the state.

Collecting methods appeared to be correlated with certain species of Mordellidae, as well. Three species, *Mordella atrata*, *M. marginata*, and *M. cervicalis*, were readily hand-collected from a diverse array of flowers while feeding, but were less frequently represented in passive traps. *Hoshihananomia octopunctata* was hand-collected from flowers with relative frequency, but this is likely due more to collecting bias relating to the large size and conspicuous color of the species than to actual species abundance. *Mordellistena divisa* was also hand-collected in relatively large numbers during the course of this study as it can reliably be found feeding on *Helianthus* sp. flowers. Some species of smaller mordellids common to prairies and savannas, particularly *M. aspersa* and species of *Mordellina*, were most frequently collected using sweep nets. While the majority of mordellid species were infrequently to rarely encountered by collectors in the field, many were obtained, sometimes in large numbers, using passive traps, especially flight intercept and Townes' malaise traps.

The limited larval rearing portion of this study yielded three species of Mordellidae from three plant species: *M. cervicalis* and *M. pulchra* were reared from stems of *A. millefolium* and *Erigeron* sp., and *M. pustulata* was reared from *A. millefolium*, *Erigeron* sp., and *H. grosseserratus*. The mordellids reared by Williams (1999) and reported as "unidentified" were determined: *M. convicta* was reared from *S. perfoliatum*, *S. gigantea*, and *H. autumnale*, and *M. pustulata* was reared from *E. maculatum*, *V. fasciculata*, *S. canadensis*, *R. laciniata*, *S. gigantea*, *H. helianthoides*, *H. tuberosus*, *G. andrewsii*, *H. autumnale*, and *E. perfoliatum*.

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